Waste Disposal Interpretations

Sanitary Facilities

The nature of the soil is important is selecting sites for sanitary facilities, and in identifying limiting soil properties and site features to be considered in planning, design, and installation. Soil limitations ratings of slight, moderate, or severe are given for septic tank absorption fields, sewage lagoons, and trench and area type sanitary landfills. Soil suitability ratings of good, fair, and poor are given for daily cover for landfills. Limitations or suitability terms used in this subsection are as follows:

SLIGHT (or Good) - relatively free of limitations or limitations are easily overcome.

MODERATE (or Fair) - limitations need to be recognized, but usually can be overcome with good management or special design.

SEVERE (or Poor or Very Poor) - limitations are difficult or impractical to overcome.

Sanitary Facility Type

SEPTIC TANK ABSORPTION FIELDS are subsurface systems of tile or perforated pipe that distribute effluent from a septic tank into the natural soil. The centerline depth of the tile is assumed to be at a depth of 24 inches. Only the soil between depths of 24 and 60 inches is considered in making the ratings. The soil properties and site features considered are those that affect the absorption of the effluent, those that affect the construction and maintenance of the system, and those that may affect public health.

SEWAGE LAGOONS are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons have a nearly level floor surrounded by cut slopes or embankments of compacted, relatively impervious soil material.

AEROBIC LAGOONS generally are designed so that the depth of sewage is 2 to 5 feet. Relatively impervious soil for the lagoon floor and sides is desirable to minimize seepage and contamination of local ground water.

SANITARY LANDFILL (TRENCH) is a method of disposing of solid waste by placing refuse in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil that is excavated from the trench. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. Properties that influence risk of pollution, ease of excavation, trafficability, and revegetation are major considerations.

SANITARY LANDFILL (AREA) is a method of disposing of solid waste by placing refuse in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil that is imported from a source away from the site. A final cover of soil at least 2 feet thick is placed over the completed landfill. Properties

that influence trafficability, revegetation, and risk of pollution are the main considerations for area type sanitary landfills.

DAILY COVER FOR LANDFILL is the sod material that is applied daily to compacted solid waste in an area type sanitary landfill. The cover material is obtained off-site, transported, and spread on the area. Suitability of a soil for use as cover is based on properties that reflect workability and the ease of digging and of moving and spreading the material over the refuse daily during both wet and dry periods.

Waste Management

The nature of the soil is also important in the application of organic wastes and wastewater to land as fertilizers and irrigation; it is also important when the soil is used as a medium for treatment and disposal of these wastes. Favorable soil properties are required to prevent environmental damage.

The use of organic wastes and wastewater as production resources will result in energy conservation, prevent the waste of these important resources, and prevent problems associated with their disposal. Where disposal is the goal, and a maximum amount is disposed in a minimum area to hold costs to a minimum, risk of environmental damage is the principal constraint. Where the reuse goal is pursued, and a minimum amount is applied to a maximum area to obtain the greatest benefit, environmental damage is unlikely.

This section includes:

- (a) Sanitary Facilities
- (a) Waste Management

Sanitary Facilities

(The information in this report indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Septic tank absorption field		Sewage lagoons		 Sanitary landfill (tro 	ench)	Sanitary landfill (area)	Daily cover for landfill	
	Limitation	<u>Value</u>	Limitation	Value	Limitation	Value	Limitation	Value	Limitation	<u>Value</u>
15002: McGirk	-wetness (very limited)	 1.00 0.85 	 Very limited ~wetness (very limited) 	 1.00 	(very limited) ~too clayey (limited)	 0.80 0.36	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~hard to pack (limited) ~too clayey (moderately limited)	 1.00 0.70 0.60
66000: Moniteau	-wetness (very limited)	 1.00 0.45	 Very limited ~flooding (very limited) ~wetness (very limited) 	İ	(very limited) ~flooding (very limited)	i	 Very limited ~flooding (very limited) ~wetness (very limited) 	i	 Very limited ~wetness (very limited) ~too acid (slightly limited) 	 1.00 0.24
70008: Goss	 slightly limited ~percs slowly (slightly limited) 	 0.15 	 Limited ~slope (limited) ~seepage (moderately limited)	 0.50	 Very limited ~too clayey (very limited) 	 1.00 	 Not limited 		 Very limited ~small stones >35% (very limited) -too clayey (slightly limited)	 1.00 0.24
70009: Goss	 Limited ~slope (limited) ~percs slowly (slightly limited)	İ	 Very limited ~slope (very limited) ~seepage (moderately limited) 	 0.50	(very limited)	 1.00 0.63 	 Limited ~slope (limited) 	0.63	 Very limited -small stones >35% (very limited) -slope (limited) -too clayey (slightly limited)	 1.00 0.63 0.24
70023: Eldon	 Slightly limited ~percs slowly (slightly limited) 	 0.15 	 Limited ~slope (limited) ~seepage (moderately limited)	 0.50	 Limited ~too clayey (limited) 	 0.70 	 Not limited 		 Limited ~small stones (limited) ~too clayey (moderately limited)	 0.98 0.45

Map symbol and soil name	Septic tank absorpt. field	ion	Sewage lagoons		Sanitary landfill (trench)		 Sanitary landfill (a 	rea)	Daily cover for landfill	
	Limitation	<u>Value</u>	<u>Limitation</u>	<u>Value</u>	Limitation	Value	Limitation	<u>Value</u>	<u>Limitation</u>	<u>Value</u>
70024: Goss	-slope (very limited)	i	(very limited)	 0.50	 Very limited ~slope (very limited) ~too clayey (very limited) 	 1.00 1.00 	 Very limited ~slope (very limited) 	 1.00 	 Very limited ~slope (very limited) ~small stones >35% (very limited) ~too clayey (slightly limited)	 1.00 1.00 0.24
70028: Moko	-depth to bedrock (very limited)	i	 Very limited ~depth to bedrock (very limited) ~slope (very limited) 	i	 Very limited ~depth to bedrock (very limited) ~too acid (very limited) ~slope (slightly limited)	İ	 Very limited ~depth to bedrock (very limited) ~slope (slightly limited)	į	 Very limited ~depth to bedrock (very limited) ~too acid (very limited) ~small stones (limited)	 1.00 1.00 0.99
Rock outcrop	 Not rated	 	 Not rated	 	 Not rated		 Not rated		 Not rated	
70046: Sacville	-wetness (very limited)	İ	 Very limited ~wetness (very limited) ~slope (moderately limited) 	 0.31	 Very limited ~wetness (very limited) ~too clayey (limited)	 1.00 0.66	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~hard to pack (limited) ~too clayey (moderately limited)	 1.00 0.70 0.39
73012: Gravois	-wetness (very limited)	 0.48	 Very limited -wetness (very limited) -slope (limited)	i	 Very limited -wetness (very limited) -too clayey (very limited) -large stones (slightly limited)	 1.00 1.00 0.02	 Limited -wetness (limited) 	 0.92 	 Very limited -too clayey (very limited) -wetness (moderately limited)	 1.00 0.57
73034: Gravois, eroded	-wetness (very limited)	 0.48	 	į	 	 1.00 1.00 0.02	Limited -wetness (limited)	 0.92 	 	 1.00 0.57

Map symbol and soil name	Septic tank absorption field		Sewage lagoons		Sanitary landfill (tr	ench)	Sanitary landfill (a: 	rea)	Daily cover for landfill	
	Limitation	Value	Limitation	<u>Value</u>	Limitation	<u>Value</u>	Limitation	<u>Value</u>	Limitation	Value
73035: Gravois	<pre> ~wetness (very limited) ~percs slowly (moderately limited)</pre>	 0.48 0.37	(very limited)	į	 Very limited ~wetness (very limited) ~too clayey (very limited) ~slope (moderately limited)	 1.00 0.37	 Limited ~wetness (limited) ~slope (moderately limited) 	 0.37	 Very limited ~too clayey (very limited) ~wetness (moderately limited) ~slope (moderately limited)	0.37
73036: Willowfork	~wetness (very limited)	 0.45	 Very limited ~wetness (very limited) ~seepage (moderately limited) 	 0.50	 Very limited ~wetness (very limited) ~too clayey (moderately limited) 	0.45	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~hard to pack (limited) ~too clayey (slightly limited)	 1.00 0.70 0.23
73037: Friendly		 0.45	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~too clayey (very limited)	 1.00 1.00	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~too clayey (very limited)	 1.00 1.00
73038, 73039: Glensted		 1.00 	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~too clayey (limited)	 1.00 0.90	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~too clayey (limited)	 1.00 0.80
73040: Maplewood		 1.00 	 Very limited ~wetness (very limited) ~slope (slightly limited)	İ	 Very limited ~wetness (very limited) ~too clayey (limited) ~large stones (slightly limited)	 1.00 1.00 0.11	 Very limited ~wetness (very limited) 	 1.00 	 Very limited ~wetness (very limited) ~too clayey (limited) ~hard to pack (limited)	 1.00 0.99 0.70

Map symbol and soil name	Septic tank absorpt:	ion	Sewage lagoons		Sanitary landfill (tr	rench)	Sanitary landfill (a: 	rea)	Daily cover for landfill	
	Limitation	<u>Value</u>	Limitation	<u>Value</u>	Limitation	<u>Value</u>	Limitation	<u>Value</u>	Limitation	Valu
73041: Maplewood	 	 	 Very limited	 	 Very limited		 Very limited	 	 Very limited	
Maplewood		 1.00 	very limited -wetness (very limited)	 1.00 	very limited very limited very limited	1.00	very limited -wetness (very limited)	 1.00 	very limited ~wetness (very limited)	1.00
		 	~slope (very limited)	1.00 	~too clayey (limited)	1.00		 	~too clayey (limited)	0.99
	 	 	 -	 	~large stones (slightly limited)	0.11	 	 	~hard to pack (limited) 	0.70
73042: Niangua	 Town limited	 	 Very limited		 Very limited		 Very limited	<u> </u>	 Very limited	
Niangua		 1.00 		 1.00 	very limited ~slope (very limited)	1.00	very limited ~slope (very limited)	 1.00 	very limited ~slope (very limited)	11.00
		•			~depth to bedrock (very limited)	 1.00 	~depth to bedrock (moderately limited)	•	~too clayey (very limited)	1.00
	~percs slowly (moderately limited)	0.45	 	 	~too clayey (very limited)	1.00		 	~hard to pack (limited)	0.70
Bardley		 1 00	 Very limited	 1 00	 Very limited		 Very limited	 1 00	 Very limited	
	(very limited)	İ	(very limited)	į	~slope (very limited) ~depth to bedrock	İ	~slope (very limited) ~depth to bedrock	į	~slope (very limited) ~depth to bedrock	1.00 1.00
	(very limited)	İ	(very limited)	į	(very limited) -too clayey	11.00	(very limited)	 	(very limited) ~too clayey	11.00
	(slightly limited) 	 	(moderately limited) 	 	(very limited) 	 	 	 	(very limited) 	
73043: Hartville	 Very limited	 	 Very limited	 	 Very limited	 	 Very limited	 	 Very limited	
	(very limited)	İ	(very limited)	İ	~wetness (very limited)	i	~wetness (very limited)	1.00 	~wetness (very limited)	1.00
	~percs slowly (limited) 	0.85 	~slope (limited) 	0.91 	~too clayey (limited) 	0.80	 	 	~hard to pack (limited) ~too clayey	0.70 0.60
		 	 	 		į	 	 	(moderately limited) 	
73044, 73045: Crestmeade	 Very limited	 	 Very limited	; 	 Very limited	į i	 Very limited	; 	 Very limited	į
	-wetness (very limited)	1.00	~wetness (very limited)	1.00	-wetness (very limited)	1.00	-wetness (very limited)	1.00	-wetness (very limited)	1.00
	~percs slowly (limited)	0.85 	 	 	~too clayey (limited)	0.68 	 	 	~hard to pack (limited)	0.70
	 	 	 	 	 		 	 	<pre> ~too clayey</pre> (moderately limited)	0.42

Map symbol and soil name	Septic tank absorp	tion	Sewage lagoons		Sanitary landfill (tro	ench)	Sanitary landfill (a	area)	Daily cover for landfill	
	Limitation	Value	Limitation	<u>Value</u>	<u>Limitation</u>	<u>Value</u>	Limitation	Value	Limitation	Valu
73046:			1		1				1	!
Wrengart	 IVomes limited	!	 Very limited		 Very limited	ļ	 Limited	-	 Moderately limited	1
Wrengar c	very rimited ~wetness	1	~wetness	I I 1 00		1	~wetness		roderacery rimited rtoo acid	0.48
	(very limited)	1	(very limited)	1	(very limited)	1	(limited)	1	(moderately limited)	
	~percs slowly	I In 15	~slope	I In 91		 0.82	(IIMICGG)	-	~wetness	0.41
	(slightly limited)	10.13	(limited)	1	(limited)	0.02 	! !	-	(moderately limited)	
	(Blighely limited)	ł	-seepage	10.50		0.48	i I	i .	~too clayey	0.08
			(moderately limited)	•	(moderately limited)	•		į	slightly limited)	
73047:	 		 	 	 	 	 		 	
Bardley	Very limited		Very limited		Very limited		Very limited	1	Very limited	
	~depth to bedrock	1.00	~depth to bedrock	1.00		1.00	~depth to bedrock	1.00	~depth to bedrock	1.00
	(very limited)		(very limited)		(very limited)		(very limited)		(very limited)	
	~percs slowly	0.15	~slope	1.00		1.00		0.04	-too clayey	1.00
	(slightly limited)		(very limited)		(very limited)		(slightly limited)		(very limited)	
	~slope	0.04	1			1.00	l		-too acid	1.00
	(slightly limited) 		(moderately limited) 	 	(very limited) 	 	 		(very limited) 	
Moko	 Very limited	i	 Very limited	İ	 Very limited	į	 Very limited	i	 Very limited	i
	~depth to bedrock	1.00	~depth to bedrock	1.00	~depth to bedrock	1.00	-depth to bedrock	1.00	~depth to bedrock	1.00
	(very limited)		(very limited)		(very limited)		(very limited)		(very limited)	
	~slope	0.04	~slope	1.00	~too acid	1.00	-slope	0.04	-too acid	1.00
	(slightly limited)		(very limited)		(very limited)		(slightly limited)		(very limited)	
						0.04	l		~small stones	0.99
	 		 	 	(slightly limited) 	 	 	 	(limited) 	l i
73048:		į		į		į		į		į
Rueter	Slightly limited		Very limited		Limited		Limited		Very limited	
	~percs slowly	0.15	~seepage	11.00	~too clayey	0.92	~seepage	0.75	~small stones >35%	1.00
	(slightly limited)	!	(very limited)		(limited)		(limited)	!	(very limited)	
	1	!	~slope	10.91		0.36	 -	!	-too clayey	0.83
	1	!	(limited)		(moderately limited) ~large stones	 0.04	 	!	(limited) ~seepage	10.50
	 	!	 		~large stones (slightly limited)	0.04	 	-	~seepage (moderately limited)	
	 		 	! 	(singuciy nimiced) 	! 	 		(moderacely limited) 	<u> </u>
73050:	<u> </u>	ļ	[I	<u> </u>	1	[[
Rock outcrop	Not rated 		Not rated 	 	Not rated 	 	Not rated 		Not rated 	
Bardley			 Very limited	į	 Very limited	į	 Very limited		 Very limited	į
	~slope	11.00		11.00		11.00	~slope	11.00	~slope	1.00
	(very limited)		(very limited)		(very limited)		(very limited)		(very limited)	
	~depth to bedrock	1.00	~depth to bedrock	1.00		1.00	~depth to bedrock	1.00	~depth to bedrock	1.00
	(very limited)		(very limited)		(very limited)		(very limited)	!	(very limited)	
	~percs slowly	0.15	~seepage	•		1.00		!	~too clayey	1.00
	(slightly limited)	1	(moderately limited)	1	(very limited)	I	I	1	(very limited)	1

Map symbol and soil name	Septic tank absorpt: field	ion	 Sewage lagoons 		 Sanitary landfill (trench)	 Sanitary landfill 	(area)	 Daily cover for land 	fill
	Limitation	<u>Value</u>	Limitation	<u>Value</u>	Limitation	Value	Limitation	Value	Limitation	Value
73112: Gunlock	-wetness (very limited)	 0.45	(very limited)	İ	 Very limited ~wetness (very limited) ~too clayey (very limited)	 1.00 1.00	 Limited ~wetness (limited) 	 0.96 	 Very limited ~too clayey (very limited) ~wetness (moderately limited)	 1.00 0.59
73136: Union	~wetness (very limited)	İ	 Very limited -wetness (very limited) -seepage (moderately limited) 	į	 Very limited -wetness (very limited) -too clayey (very limited) -too acid (limited)	 1.00 1.00 0.76	 Limited -wetness (limited) 	 0.96 	 Very limited -too clayey (very limited) -too acid (limited) -wetness (moderately limited)	 1.00 0.76 0.59
73137: Clafork	~wetness (very limited)	 0.45	(very limited) ~seepage (moderately limited)	 0.50 0.31	 Very limited -wetness (very limited) -too clayey (limited)	 1.00 0.80	 Limited -wetness (limited) 		Limited -hard to pack (limited) -wetness (moderately limited) -too clayey (moderately limited)	0.39
73138: Clafork	-wetness (very limited)	 0.45	(very limited)	 0.31	 Very limited ~wetness (very limited) ~too clayey (limited)	 1.00 0.66	 Limited ~wetness (limited) 	 0.99 	 Limited ~hard to pack (limited) ~wetness (moderately limited) ~too clayey (moderately limited)	0.39
73190: Winnipeg	 	 0.15 	(limited)	 0.91 0.50	 - Slightly limited ~too clayey (slightly limited) 	 0.11 	 Not limited 		 	 0.12
75376: Cedargap	-flooding (very limited)	 0.45	(very limited)	İ	 Very limited ~flooding (very limited) ~too clayey (limited)	 1.00 0.80	 Very limited ~flooding (very limited) 	 1.00 	 Very limited ~small stones >35% (very limited) ~too clayey (moderately limited) 	 1.00 0.60

Map symbol and soil name	Septic tank absorption field		Sewage lagoons		Sanitary landfill (tro	ench)	Sanitary landfill (area)		Daily cover for landfill	
	Limitation	<u>Value</u>	<u>Limitation</u>	<u>Value</u>	<u>Limitation</u>	<u>Value</u>	Limitation	<u>Value</u>	<u>Limitation</u>	Value
75378: Sturkie	~flooding (very limited)	İ	 Very limited ~flooding (very limited) ~seepage (moderately limited)	 0.50	 Very limited ~flooding (very limited) 	 1.00 	 Very limited ~flooding (very limited) 	 1.00 	 Not limited 	
75384: Healing	~flooding (very limited)	İ	 Very limited ~flooding (very limited) ~seepage (moderately limited)	 0.50	(very limited)	 1.00 0.01	 Very limited ~flooding (very limited) 	 1.00 	 Not limited 	
75385: Gabriel	~wetness (very limited) ~flooding (very limited)	 1.00 0.45	 Very limited ~flooding (very limited) ~wetness (very limited)	i	(very limited) ~wetness (very limited)	 1.00 1.00 0.04	 Very limited ~flooding (very limited) ~wetness (very limited) 	 1.00 1.00 	 Limited ~wetness (limited) 	 0.86
75386: Speed	<pre> -wetness (very limited) -flooding (rare) (moderately limited)</pre>	 0.60	 Very limited -wetness (very limited) -seepage (moderately limited) 	 0.50	(very limited)	 0.60	 Limited ~wetness (limited) ~flooding (rare) (moderately limited) 	 0.60	 Moderately limited ~wetness (moderately limited) 	 0.55
75387: Hacreek	~wetness (very limited) ~flooding (very limited)	 1.00 0.45	 Very limited ~flooding (very limited) ~wetness (very limited) 	i	(very limited) ~wetness (very limited)	 1.00 1.00 0.31	 Very limited ~flooding (very limited) ~wetness (very limited) 	İ	 Very limited ~wetness (very limited) ~too clayey (slightly limited) 	 1.00 0.15

Map symbol	Map symbol Septic tank absorption and soil name field		Sewage lagoons		Sanitary landfill (tr	ench)	Sanitary landfill	(area)	Daily cover for landfill	
and soil name					1				I	
	Limitation	<u>Value</u>	Limitation	Value	Limitation	Value	Limitation	Value	Limitation	Value
75415:	 	 	 	 	 	l i	 	ļ i	 	ļ
Jemerson	 Very limited	! !	 Very limited	i	 Very limited	1	 Very limited	-	 Not limited	i
o cancer born		•	~flooding	•	~flooding	•	~flooding	1.00		i
	(very limited)	1	(very limited)	1	(very limited)	1	(very limited)	1	i .	i
		I In 52		10 50	~wetness	0.26	(very rimited)		 	-
	(moderately limited)		seepage (moderately limited)	•	(slightly limited))	10.20	! !	-]]	-
		 0.15		0.39		¦	! !	-]]	-
		10.13		•] 	!	! !		l i	-
	(slightly limited)	l I	(moderately limited)	i i	 		 	l I	 	¦
75421:	İ	! 	! 	i	! 	i	 		İ	i
Racket	Very limited	i	Very limited	i	 Very limited	i	Very limited	i	Not limited	i
	~flooding	1.00	-flooding	1.00	~flooding	11.00	-flooding	11.00	İ	i
	(very limited)	i	(very limited)	i	(very limited)	i	(very limited)	i	į	i
		1.00		11.00	~seepage	1.00	~seepage	1.00	i	i
	(very limited)	i	(very limited)	i	(very limited)	i	(very limited)	i	İ	i
		0.37		0.02	~wetness	0.19	i	i	i	i
	(moderately limited)		slightly limited)		(slightly limited))	i	İ	i	İ	i
	!	!	<u> </u>	ļ.	!	ļ	<u> </u>	ļ	ļ.	ļ
99000:	ļ.	!	!	!	!	!	!	!	!	!
Pits	Not rated	 	Not rated		Not rated		Not rated	ļ	Not rated	-
99001:] 	 	 	ŀ	! 	i	 	ļ] 	i
Water	Not rated	i	Not rated	i	Not rated	i	Not rated	i	Not rated	i
	İ	i	İ	i		i		i	İ	i
99003:	j	İ	İ	İ	İ	j	İ	j	j	į
Miscellaneous	I	I				1			1	1
water	Not rated	I	Not rated	I	Not rated	1	Not rated	İ	Not rated	İ